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ABSTRACT

Aging of the national population coupled with shifts in long-term redistribution trends have sparked interest in the spatial distribution of the elderly population. The insufficiency of economic models for explanations of elderly migration has been recognized and new approaches are being developed. Findings regarding the effects of retirement, climate, and family, as well as other variables, support the notion that the elderly are more responsive to amenity or quality of life variables. The formulation of models to explain the origins of spatial variation in age structures and to predict the consequences of this variation should take into account the demographic dynamics of the aging process, recognizing that: (1) the behavior of both the young and old can influence spatial variation in aging; (2) in low fertility, low mortality societies, fertility and mortality will move the society toward spatial homogeneity; and (3) in such societies, migration is the major process generating spatial variation in age structures. Research must concentrate on investigating the consequences of elderly redistribution. (Author/NRB)

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RURAL/URBAN RESIDENCE AND THE AGING POPULATION

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Rural/Urban Residence and the Aging Population

Tim B. Heaton

The 1970s have been characterized by population deconcentration to smaller places, to nonmetropolitan areas, and to the South; but multivariant analysis of growth rates over the last three decades indicates that shifts in the growth differential between metropolitan and nonmetropolitan areas are more salient than either size of place or regional shifts, with regional shifts being the smaller of the three (Heaton and Fuguitt, 1980). These shifts in population distribution trends have sparked increased interest in the spatial distribution of the elderly population. It is thought that growth of the elderly population coupled with a difference in the residential location of the young and elderly have played an important part in these redistribution trends. Thus, this essay will focus on size of place and metropolitan status as dimensions of the changing residential distribution of elderly people.

Here we will review some of the recent literature on residential location of the elderly and suggest some ways in which existing research might be extended to provide a more adequate understanding of the processes which sort the elderly into various types of places, and of the consequences of these processes. Three major topics will be considered, namely: (1) What are the demographic dynamics of change in the relative size of the elderly population? (2) How well do existing models of migration fit the elderly population? and (3) What are the consequences of elderly redistribution for the individuals and communities involved?

I. Demographic Processes and the Spatial Distribution of the Elderly.

Recent Trends. The age structure of a population is a function of the fertility and mortality schedules for that population. Likewise, change in the age structure is a consequence of these two schedules in conjunction with the inevitable aging-in-place of the existing population. When a spatial dimension is added to the analysis, migration becomes an important determinant of age structure as well. Here it is important to note how the relative importance of these components varies according to the size of the geographical units utilized. At one extreme, if only one geographical unit, inclusive of the entire population, is considered, internal migration will not appear as a component by definition. As smaller geographic subunits are taken into consideration, successively finer grids are applied, more residential moves are counted, and the relative importance of migration increases. This empirical generalization must be remembered when we compare the relative magnitude of components of change in the age structure, since the outcome of our comparison will depend, in part, on the geographical units being considered.

In an insightful analysis of the changing distribution of older persons, Graff and Wiseman (1978) provide a description of the way in which these components can operate. Aging-in-place in combination with out-migration of young cohorts appears to explain high percentages of older persons in the nonmetropolitan Midwest and Great Plains. "Selective migration of younger cohorts from major metropolitan centers leaves an older, aging-in-place population in central cities" (p. 386). In contrast, elderly in-migration accounts for elderly concentrations in peninsular Florida. Yet another pattern is observed in many northeastern and western states, where in-migration of younger cohorts has produced a decline in the proportion of elderly people.

Graff and Wiseman (1978) also note some of the temporal dynamics of these components of change. For example, they conclude that "rapid increase in the percentage of elderly appears to lag behind the period of maximum rural settlement by several decades" (p. 386) and that "dying-in-place inevitably follows aging-in-place" (p. 390). In the past, they argue, aging-in-place coupled with young migration have been the dominant components of change, but in the future aging-in-place and dying-in-place will be of major importance while aged migration will become more salient. These comments provide clues for a more formalized model of temporal relationships among components of change in the spatial distribution of the elderly which will be outlined later.

In a similar vein using more recent data, Golant (forthcoming) has noted that aging-in-place is, of late, leading to aging of the suburbs, and that the growth of the aged in central cities has slowed due to aging-in-place of a smaller cohort, which did not participate in a move to the suburbs. In a comparison of young and elderly migration he notes that the patterns are similar although elderly migrants appear to have a greater preference for nonmetropolitan areas than for suburbs and central cities when compared with younger migrants. Because the size of the elderly migration stream is small, however, Golant concludes that "with few exceptions the migration flows of elderly people are unlikely to influence substantially the future shifts in their metropolitan-nonmetropolitan locational distributions" (p. 16). As a cautionary note, Golant does make an erroneous statement that in the 1970-75 period nonmetropolitan areas became younger. He does not cite a source for this finding, whereas data reported by Lichter, et al. (1980) indicates that nonmetropolitan areas are aging.

Components of Change. Some studies have gone beyond the recognition that various factors can create a change in the relative size of the elderly population, and have made an attempt to quantify these components of change. Golant, et al. (1978) partitioned change in the size of the cohort aged 55 and over into net migration, death, and annexation. (Annexation does not entail actual relocation of persons and will be ignored in this essay.) For the nation as a whole, between 1960 and 1970, only the smallest central cities (under 50,000) had net migration gains of white persons aged 55 plus. Above size 50,000, the larger the central city the greater was the white net migration loss. In contrast, the larger the central city the greater the net migration gain of nonwhite population. But the net migration component was dwarfed by the percentage decline due to deaths which varied little across regions or sizes of central cities. The magnitude of the death component is, perhaps, a little deceptive since the elderly population is continually replenished by aging-in-place of younger cohorts.

Taking a different approach, Van Es and Bowling (1979) predict change in the elderly over two successive decades utilizing net migration of a young (age 15-19 at the beginning of the decade) cohort, along with measures of urbanization, economic conditions, and elderly concentration. In the Illinois counties studied net inmigration of the young has a strong negative association with aging, while elderly migration has a small positive effect in one decade and a small negative effect in the other. A negative association between elderly migration and aging of the population seems counter-intuitive and no compelling explanation is offered. Perhaps inclusion of the entire age distribution in the migration rates would yield more consistent results. In any event, this

study does document the importance of young migration for explanation of population aging, and, in fact, shows that young migration has a substantially larger impact than elderly migration. Moreover, the study notes that a reversal in migration trends may have resulted in a change in the parameters for particular variables; a point which will be developed later in this essay.

Yet another approach is taken by Stahura (1980) in an analysis of the aging of suburban populations. Change in the aged-child ratio is decomposed into change in the proportion of aged and change in the proportion of children. Of the two, change in the aged is found to have by far the largest effect on the aged-child ratio. But the reader is left wondering what roles migration and aging of the local population play in the observed aging of suburbs. As with the preceding approaches, this decomposition, though it does provide new insights, seems to paint an incomplete picture of the processes which generate spatial variance in the age structure.

The most complete decomposition to date derives two components of change in the absolute size of the elder population, namely, elderly natural increase (includes deaths and aging in place) and elderly net migration, and four additive components of change in the relative size of the elderly population, namely: (1) elderly natural increase, elderly net migration, young natural increase (includes births, deaths, and aging in place), and young net migration (Lichter, et al, 1980). Analysis of change in these components over a 25-year span comparing counties at various levels of urbanization, demonstrates the rather complex set of demographic processes which affect the age structure. Among other things they find an increase in the "importance of net migration gain in

the absolute growth of the elderly population in nonmetropolitan counties and small SMSAs (p. 14), a reversal in migration for the young and old alike, and a slowing of the aging process in remote nonmetropolitan areas. Moreover, "the demographic components of the young also exercise an important effect on the rate of increase in the elderly proportion (p. 14). Although the natural increase components of change in the relative size of the elderly population tend to be larger than the migration components on the average, the migration components exhibit greater variance across types of counties. As was noted above, a finer distinction between types of counties would yield even greater variance in the migration components.

Demographic dynamics of the aging process. Using formal demographic techniques, it can be demonstrated that, regardless of the initial age structure, fixed mortality and fertility schedules will generate a fixed age structure (i.e., the proportion in each age group remains constant over time) in a matter of a few generations Coale, 1957). Extending this logic to the spatial dimension, if the fertility and mortality schedules are fixed and remain constant from one area to the next, then each area will eventually attain the same age structure, given that no migration occurs. In such a system, the combination of births, deaths, and aging creates homogeneous spatial units with respect to age structure. Areal differences in fertility, mortality, and migration are the only factors which can create spatial variance in the age structure, and any existing spatial variance is a product of the past history of these demographic processes.

In low fertility/low mortality societies, it appears that migration is the major process which brings about population redistribution (Goldstein, 1975). In such societies, much of the spatial variation in age

structure may be due to migration (see Appendix). Assuming for simplicity's sake that fertility and mortality are invariate over space, migration can be thought of as a disturbance which creates spatial differences in age structure. Fertility, mortality, and aging, then, act so as to reestablish spatial homogeneity.

In such a society, the impact of any migration which occurs at one point in time will eventually be erased by other demographic processes. The effects of elderly migration are relatively short lived. Areas of out-migration will have fewer deaths in subsequent years due to a shortage of older people. In contrast, areas of inmigration will have more deaths due to an excess of older people. Once later birth cohorts age and the migrant cohort dies off, spatial balance is restored.

The consequences of younger migration are more complex. Initially, areas experiencing out-migration have an older age structure, and inmigration to other areas creates a younger population at destination. But as the migrant cohort ages, these patterns reverse. The areas of out-migration will, at a later date, become younger even than they were before the migration occurred because of a small cohort entering old age. The reverse will be true of inmigration areas. Eventually, however, mortality will re-establish spatial homogeneity. Thus, young migration creates somewhat of a "pendulum" effect, since areas of outmigration shift from old to young and then back to normal, whereas areas of inmigration shift from young to old and back to normal.

Under circumstances described above, a migration pattern must persist over long periods of time if it is to have a long lasting affect on the age structure. Indeed, recent evidence of rural-urban differences in aging suggests that the effects of salient migration trends are

already being eroded. In the past, suburbanization of young families has been a major factor in the aging of central cities, but the gap between large central cities and their suburbs, in percentage point increases of elder persons, has narrowed substantially since the 1950s (Lichter, et al 1980). And, although the exodus of young people from nonmetropolitan areas continues, albeit at a slower pace (Tucker, 1976), nonmetropolitan areas are not aging to the same degree that they were in the 1950s, especially the remote rural counties (Lichter, et al, 1980). Evidence reported by Beale (1969) also indicates a homogenizing effect: areas that have experienced outmigration in the past had an excess of deaths over births in the 1960s because of the distorted age structures resulting from selective young outmigration.

The exact contributions of spatial variation in fertility, mortality, and migration to spatial variation in age structure remain to be demonstrated. This demonstration would require data over longer periods of time than have been reported in the preceding research. Nevertheless, the evidence considered here suggests that migration has played a greater role than fertility or mortality, and will plan an even greater role in the future. With this in mind, we turn now to a discussion of models of migration as they apply to the young and old.

II. Models of Migration

As was noted above, migration of both young and old can affect spatial variation in the proportion of elderly. In fact, it appears that young migration, rather than elderly migration, accounts for a larger share of variance in the percentage point change in elderly population (see appendix). This is not surprising when we consider that the young are much more mobile than the old. Uhlenburg (1973) suggests

that explanations of why people don't move may be at least as appropriate as explaining why they do move, and this is especially true in a discussion of the elderly.

Why don't old people move? Many authors question the relevance of economic theory for explaining elderly migration. Economic models of migration, however, offer insight into why the elderly do not move. In the first place, the cost of moving may be greater for older people. Over time, they have probably invested more in housing and other material possesions and so stand to lose more. Moreover, they have had longer to develop social ties which might bind them to their place of residence. They have also had longer to find the type of community in which they feel comfortable. In economic terms, they have had longer to accrue location specific capital which acts as a deterrent to migration (DaVanzo, forthcoming).

On the other side of the economic equation, the elderly may have less to gain from migration. For those who have withdrawn from the labor force, no income returns to migration can be anticipated. Even for those who work, the expected time period over which gains are acquired is much shorter than for a younger migrant, thus minimizing the overall expected gain from migration. About the only means available to those on a fixed income of improving their financial situation through moving is to find a destination with a lower cost of living.

The ideas presently above are only suggestive of some reasons why older people are less likely to migrate. The dearth of literature in this area is surprising given the number of articles that focus on elderly migration, and the number of questions remaining unanswered form a serious lucana in migration research.

Why Do Old People Move. At the onset it should be clear that this discussion is concerned with migration as distinguished from residential mobility. For the elderly, residential mobility is often necessitated by increased dependency, or negative aspects of one's neighborhood or housing. In such cases moves are less voluntary, than in cases where attractions at place of destination provide motivation for the move. Unlike migration, residential mobility is negatively associated with socioeconomic status among the elderly (Goldscheider, 1966). Thus, the profile of a migrant and theories of migration paint a brighter picture than would be the case if we were analyzing residential mobility.

Observations that the elderly are less responsive to economic considerations, at least when conceived in terms of getting better jobs or a higher salary, are becoming rather common place. The question remains: what factors do they respond to, what is the relative importance of these factors, and what theories might explain the observed relationships? A brief survey of the literature indicates that progress is being made along these lines of inquiry.

At older ages, employment is a deterrent to migration (Chevan and Fischer, 1979; Goldstein, 1967; Barsby and Cox, 1975; Heaton, et al, 1980a). Detachment from the labor force frees people from locational constraints due to their jobs, thus allowing for greater mobility. Beale (1977) and Fuguitt and Tordella (1980), indicate that elderly migration is an important fraction of the net immigration to nonmetropolitan areas. Moreover, Heaton, et al. (1980a) presents evidence that the flow of retired elderly to nonmetropolitan destinations is greater than the flow of employed elderly. Together these findings suggest that factors other than employment are the primary determinants of elderly migration.

Climate stands out as a variable that is particularly important for the elderly. Retirement migration to California, Florida, and Arizona form dominant interstate migration streams (Flynn, 1980). Chevan and Fisher (1979) found that climate predicts elderly interstate migration, although not as well as other factors such as employment status, income and prior lifetime migration. In an analysis of reasons for interstate moves Long and Hansen (1979) found that 5.4 percent of the total population gave climate as the reason for moving, but 12.1 percent of those over age 55 cited climate as the reason. Of those who listed climate as the reason for moving, 39.0 percent were receiving income from pensions or annuities.

Family-related reasons for moving are also more salient among the elderly. Of those aged 20-35, 12.2 percent cited family reasons for moving, compared to 17.6 percent for those over age 55 (Long and Hansen, 1979). Assuming some attachment between the elderly and their kin, it is surprising to find that return migration to state of birth is just as common among the young as among the old (Serrow, 1978; Longino, 1979). A partial explanation for this unexpected find may lie in the relationships between age, length of time away from place of birth and the probability of return migration. The probability of return migration decreases the longer the separation period (DaVanzo, 1980). If there is also a positive correlation between age and length of the separation period, then controls for length of separation would strengthen the association between age and probability of return migration, thus supporting the expectation that the elderly are more inclined to move to their place of birth.

Findings regarding the effects of retirement, climate and family, as well as other variables support the notion that the elderly are more responsive to amenity or quality of life type variables in the decision making process. This is not to say, however, that other considerations are to be excluded from explanations of elderly migration.

The decision-making typology developed by Wiseman and Roseman (1979; see also Wiseman, 1980), illustrates the diversity of conditions under which old people move. Several of their categories apply to local movers, and so will not be discussed here. Three types of migration are distinguished: amenity migration, return migration, and kinship migration (Wiseman and Roseman, 1979). Amenity migration could result from several triggering mechanisms including: "environmental stress, lessening importance of suburban and urban living as a middle class ideal, income improvements of retired persons, etc." (p. 334). Return migration may be similar in many respects to amenity migration, except for the salience of personal contacts in the selection of a destination. On the other hand, the need for assistance may be the primary motive behind kinship migration.

Each of these types of moves are consistent with activity theory and continuity theory. Activity theory emphasizes the tendency to retain activity patterns which have been developed in the past and might best explain amenity migration. Continuity theory also accounts for maintainance of familiar patterns of living, but recognizes that people must be responsive to changes that occur in life. Kinship migration and return migration are, perhaps, best explained by continuity theory. Hopefully further development of the ideas presented by Wiseman and Roseman (1979) will lead to an integration of migration decision making theories and more general theories of aging.

For those interested in spatial variation, however, the decision-making models are insufficient, standing alone, to explain which types of communities will grow or decline. Fredrickson (1980) has made an important contribution by suggesting ways in which concepts from a behavioral migration model might be applied at the community level. These concepts seem particularly applicable to elderly migration.

The behavioral model assumes that people will not even consider moving until they become dissatisfied with their place of residence (Speare, 1974). As a macro level analog, Fredrickson (1980) suggests that communities have a "threshold of dissatisfaction which inversely affects the rate of outmigration" (ie. the higher the threshold the less the outmigration). Since individuals do not consider all possible alternatives but cease searching when an alternative is encountered, communities with an "early discovery profile" have a growth advantage. Finally, when the individual has an alternative in mind, a decision for or against moving is based on a comparison between the alternative and the current residence, thus giving growth advantage to communities with a "favorable stereotype content."

Fredrickson (1980) goes on to argue that declines in the friction of space, improvements in communications, extension of urban amenities into rural areas, and a rising standard of living have lowered the dissatisfaction threshold in urban areas. In conjunction with these transformations, tourism has improved the discovery profile of rural areas and has perpetuated the cultural ideal embodied in bucolic settings, however far removed this ideal may be from the day to day realities of country living. Thus, we gain some insights into the mechanisms whereby individual decision making might alter the national settlement system.

Analysis of elderly migration in non-metropolitan areas corroborates some of the ideas presented above. Presence of amenity related factors (ie., mild climate, water and recreational development) have a much greater impact on elderly migration than do economic variables in each of three time periods considered (Heaton, et al, 1980b). In fact, coefficients for these amenity variables remain fairly stable over time, although a slight upturn is observed in more recent periods. Moreover, amenity variables have a greater impact on elderly than on young migration, while the reverse is true for economic variables. But the temporal change in migration rates and in regression coefficients are greater for the young than for the elderly, reminding us that analysis of change in the relative size of the elderly population is incomplete unless behavior of younger people is taken into account.

III. The Consequences of Spatial Variation in Age Structures

Migration is generally viewed in a positive light because it provides individuals an avenue for upward social mobility and, at the macro-level, it improves economic efficiency by bringing into balance labor supply and demand. These benefits seem less applicable to elderly migration, and at this point it is appropriate to ask the question: what are the consequences, be they positive or negative, of spatial redistribution of the elderly?

Consequences for Elderly Migrants. The models of migration discussed above imply that migrants benefit from improved quality of life at their destination. Mild winters, peace and quiet, proximity to kin, etc., make life more pleasant. In the extreme, one might go so far as to substitute quality of life for income or job opportunities into an otherwise unchanged economic model. From this optimistic view, migration

is the mechanism whereby the elderly maximize their level of satisfaction. Even in cases where negative characteristics at the origin such as an undesirable neighborhood, or dramatic changes such as death of a spouse or loss of health induce migration, there is a temptation to assume that migrants are still better off than they would have been by remaining at the place of origin.

At present, this rosy picture appears to be based on assumption more than on empirical evidence. Not that evidence contradicts such a view, it's just that we have little evidence to go by. Fuguitt (1979) reports that about 65 percent of the migrants, young and old alike, to non-metropolitan areas in the Upper Great Lakes are very satisfied with the community destination. None of those over age 50 expressed any dissatisfaction. Of course, about 58% of those migrants over age 50 were also very satisfied with their previous community, suggesting the migration resulted in a modest improvement in community satisfaction. More extensive research is needed to confirm this finding.

A less sanguine picture may emerge on the nonmigrant side of the coin. Perhaps many elderly people would like to move but lack the information or resources sufficient to make the move. We might infer from the concomitant rise in income and increased migration of the elderly, that given the resources, even more elderly people would move. Again, analysis of elderly migration opens a whole range of research questions that are not accessible by standard economic models with their emphasis on wages and employment.

Consequences for Communities. Day (1978) listed several possible consequences that may result for aging of a population including a shift in the types of goods and services demanded, increased conservativism,

and less rapid social change. Whether these changes do indeed occur remains to be seen. At the community level there are a host of other consequences that may be hypothesized. Since various demographic trends could produce an older population, various social consequences are possible depending on which trends are prevalent. Thus we must consider each of the trends in turn.

It is doubtful in our society that the spatial variance in fertility and mortality schedules will undergo dramatic change in the foreseeable future. Therefore, migration remains as the major mechanism whereby spatial differences in age structure will be altered, except, of course, for the changes that will result due to currently existing differences in the age structures. The following discussion will focus on the consequences of aging due to migration.

At this point it deserves note that elderly outmigration is much more diffuse than elderly inmigration. That is to say: migrants come from a large number of origins, but select only a few destinations (Flynn, 1980). Thus, the impact on places of origin are smaller than the impact on destinations. Also, metropolitan to non-metropolitan migration will generally have greater impact on destination than on origin because the nonmetropolitan base is smaller. If ten thousand people move from Chicago to northern Wisconsin, for example, what was a drop in Chicago's bucket would create rapid growth in the communities at destination. But whether or not there is a double effect on nonmetropolitan destinations remains to be seen.

Because of its diffuse nature, elderly outmigration may be of little consequence to places of origin. Murphy (1979) suggests three possible benefits: (1) housing stock is released for younger occupants,

(2) there is less demand for welfare services, and (3) "the inflationary pressures inherent in urbanization will be marginally relieved" (p. 90). However, these ideas are offered as possibilities rather than as empirical generalizations.

One of the major concerns with elderly migration regards the increased demand for services that may result at place of destination. On the positive side, the selective nature of migration may mitigate any shortage of services in areas of high inmigration. Elderly migrants appear to be healthier, wealthier, and more independent than nonmigrants. Bultena and Wood (1969) found that migrants to a retirement community had higher morale, in part, because of their higher social standing. In fact, an influx of people may provide a sufficient mass to increase the level of services available to all residents in low density settings. On the other hand, inmigrants may have higher expectations than residents or demand different types of services, setting the stage for potential conflict between migrants and residents (Lee, 1980; Murphy, 1979).

Service needs may be particularly acute in remote rural areas where provision of services in low density settings could prove very costly on a per capita basis. Indeed, Kasarda (1980) suggests that migrants out of large cities do not necessarily need or want many municipal services that are supported by government expenditures. To provide these services regardless of location may be counterproductive. One possible solution to the problem of balancing human welfare needs with the tax payers' and consumers' willingness to pay has been proposed by Amos Hawley (personnel communication); establish a minimum community size, on the basis of cost efficiency, above which public support could be given for human services such as health institutions, libraries, recreation, etc. Residents

would have a choice between larger places with more services or low density settings; they would not be able to have their cake and eat it too.

Of course, in selecting a destination migrants may take existing services into consideration. Heaton, et al. (1980b) found that elderly migrants to nonmetropolitan areas are less likely than young migrants to select entirely rural counties as destinations. They suggest that greater needs for health, transportation, and other services that are less accessible in rural areas leads the elderly to choose an urban residence. Lee (1980) examined the availability of health services in areas of high elderly inmigration. Contrary to prior expectations, most of these areas had sufficient facilities to meet national health standards. Whether such positive conclusions can be made in reference to other services deserves further study.

We also know little about the economic consequences of elderly inmigration. Although migrants tend to be better off than nonmigrants, the elderly, on the average, are not as well off as the population in general. Moreover, consumption patterns differ among young and old. Shifts in level of income and consumer preferences undoubtedly generate some change in a community, but the degree of change resulting from growth in the elderly population, especially in communities that are small to begin with, deserves greater attention.

It may seem a mild paradox, but growth due to the rising facility of voluntary movement of the elderly may result in increased dependency. In the first place, the community's economy is more vulnerable to national decisions regarding support for the elderly in terms of social security, medicare and other types of transfer payments. In addition, it was

noted above that any age structural changes resulting from elderly migration will be short-lived unless the migration trend persists. Once the trend ends, communities need only wait for the duration of the remaining life span of the most recent migrants until the former age distribution is restored. Thus, any community specializing as a residence for the elderly must continue to attract migrants in order to retain this function.

One important question which has implications for service needs and economic impact regards the household composition of migrants. The household rather than the individual is the unit of consumption. For methodological reasons, however, studies examine individual migrants instead of migrant households. When compared with metropolitan-to-nonmetropolitan migrants, migrants in the reverse stream are more likely to end up in dependent type living arrangements. In contrast, the metropolitan-to-nonmetropolitan migrants are apt to be married with spouse present (Clifford, et al., forthcoming; Longino, 1980b). It would appear that the greatest service burden is being placed on metropolitan areas, but total family income is greater for nonmetropolitan-to-metropolitan migrants (Longino, 1980b), suggesting that the economic benefits are also greater in metropolitan areas. More detailed analysis is needed to determine what types of services are utilized by what types of households with what levels of income.

At this point, a cautionary note against overgeneralization bears comment. In an analysis of three types of retirement communities, Longino (1980a) demonstrates the diversity among possible impacts, and illustrates that issues may be more or less relevant, depending on the type of settlement. The three communities considered by Longino include

a subsidized planned community, a nonsubsidized planned community, and a de facto retirement community. Migrants to these areas vary in the distance moved, the motives for moving, the way they were recruited, and the type of support systems that are built up. Moreover, the derived benefits vary by type of community. His findings indicate that decision-making models and macro-level theories such as those discussed above might explain why different types of communities emerge, as well as provide a framework for assessing the consequences of migration, even in those communities that are aging but are not necessarily "retirement communities."

With all the attention that is being placed on elderly migration it may be easy to forget that young migration can play an equally or even more important role in the changing age structure of an area. We now briefly turn to the impact of aging as a result of young migration.

Aging due to young migration. Young and old migration often occur concurrently. Correlations between the young and old migration components of change in the elderly population (see appendix for further discussion) range between .5 and .6 for the 1950s, 1960s and 1970s, and as a consequence, tend to balance each other. For example, in the 1970-75 period Florida continued to receive a substantial number of elderly inmigrants, but the percentage of elderly remained stable because young people were also moving in. Nevertheless, the young are more mobile and thus tend to have a greater impact on age structure. This impact is especially noticeable in areas the young have been leaving behind, such as central cities and remote rural areas.

In such cases, untangling the impacts due to aging from the overall consequences of factors which led to outmigration in the first place,

may prove a formidable task. It may prove more fruitful to simply view aging as one aspect of the complete process of decline. This process may have both negative and positive consequences.

One of the most obvious consequences of young outmigration may be to bring balance to a labor market with labor surplus. This would be of little direct benefit to most of the elderly who are not in the labor force. For the elderly who do work, or would like to work, however, outmigration may facilitate their entrance into the labor force, permit upward mobility, or delay the onset of unemployment, particularly where the elderly are at a disadvantage to begin with. Outmigration may also ease competition in the housing market and permit the elderly to obtain better housing, or the same housing at a lower price. Other benefits may also accrue, but until empirical research can document these benefits, skepticism is called for.

As far as the elderly are concerned, negative consequences of young outmigration probably outweigh the benefits. Outmigration signals a decline in the tax base, and a potential rise in the tax rate if public services are to be maintained. Outmigration may also lead to a drop in the total demand for labor and the availability of goods and services may, in response to population decline, deteriorate (Parr, 1966). To make matters worse, those who leave may be the most educated and capable residents, thus draining the area of a valuable resource. In combination, decline in services, rise in tax rates, and loss of human capital may discourage employment growth, and even cause existing firms to move elsewhere (Parr, 1966). A negative spiral could develop which leaves the area in a depressed state.

Although the elderly on a fixed income may remain unaffected by unemployment or declines in the wage rate, they may bear the brunt of other negative consequences. They may be quite dependent on local services, and thus most affected by their loss. Any increase in tax rates would prove most difficult for those on a fixed income. Moreover, the elderly may be least able to escape these consequences by moving away, because of their location specific capital. The irony is that older residents may have more invested in the local area in terms of total public service given and tax dollars paid. Again, however, it is necessary to point out that these comments are speculative: the shortage of accurate generalizable information is serious. Hopefully, raising the issues will provide motivation for good research.

Conclusion

Aging of the national population coupled with shifts in long-term redistribution trends have sparked interest in spatial distribution of the elderly population. Progress has been made in developing models of elderly migration. The insufficiency of economic models, at least as they are traditionally conceptualized, for explanation of elderly migration has been recognized and new approaches are being developed. In assessment of the consequences of elderly redistribution, however, research has lagged behind. Hopefully, research directed at examination of these consequences will receive high priority in the 1980s. Formulation of models to explain the origins of spatial variation in age structures and to predict the consequences of this variation should take into account the demographic dynamics of the aging process, recognizing that: (1) the behavior of both the young and old can influence spatial variation in aging, (2) in low fertility, low mortality societies' fertility and

mortality will move the society toward spatial homogeneity, and (3) in such societies migration is the major process generating spatial variation in age structures.

Appendix

In this brief note we examine the effects of four demographic components on change in the percentage of population over 65. The components are young natural increase (YNI), young migration (YMG), elderly natural increase (ONI), and elderly migration (OMG), and the computational procedures are described in Lichter, et al. (1980). The components were computed for each county in the United States for three time periods: 1950-60, 1960-70, and 1970-75. Then the change percentage over age 65 was regressed on the four components. Since the components uniquely define the dependent variable, explained variance is always one hundred percent. The standardized coefficients are equivalent to the ratio of the standard deviation of the independent variable over the standard deviation of the dependent variable, and are interpreted as the relative importance of each component in explaining spatial variation in change in the percentage of elderly across counties.

Results are as follows:

	Period		
Component	1950-60	1960-70	1970-75
YNI	.220	.260	.277
YMG	1.046	.995	1.111
ONI	.393	.462	.568
OMG	.813	.933	.865

Young migration consistently has the largest effect on percentage point change in the elderly, and elderly migration ranks a not too distant second. Migration is clearly more important than natural increase components. Coefficients are quite stable, with the notable

exception that the elderly natural change component increases in magnitude. This trend suggests the growing magnitude of aging and dying in place, in response to earlier young migration from rural to urban areas, and from central cities to suburbs.

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